Amendments to the Claims:

This listing of claims will replace all prior versions of claims in the application.

1-19. (Cancelled)

20. (Previously Presented) The method of claim 45 wherein the HF is delivered into the process chamber in vapor form.

21. (Original) The method of claim 20 wherein the HF vapor is delivered into the process chamber via a carrier gas.

22. (Original) The method of claim 21 wherein the carrier gas comprises ozone.

23. (Previously Presented) The method of claim 20 wherein the oxidized silicon is removed as SiF_4 in vapor form from the process chamber.

24. (Previously Presented) The method of claim 45 wherein the HF is delivered into the process chamber in aqueous form.

25-32. (Cancelled)

33. (Previously Presented) The method of claim 42 wherein the wafer is etched at more than 1000 Angstroms/minute.

34. (Previously Presented) The method of claim 42 wherein the wafer is etched at more than 5000 Angstroms/minute.

35. (Previously Presented) The method of claim 42 wherein the wafer thickness is reduced to 50-100 microns by back-grinding and then by the ozone gas and the HF chemically reacting with the silicon wafer.

36. (Previously Presented) The method of claim 42 wherein the wafer thickness is reduced by at least 400 microns by back-grinding and then by the ozone gas and the HF chemically reacting with the silicon wafer.

37-41. (Cancelled).

42. (Previously Presented) A method of thinning at least one silicon wafer, comprising:

backgrinding or plasma etching a surface of the wafer;

placing the wafer into a process chamber;

forming a liquid layer on the surface of the wafer;

controlling a thickness of the liquid layer;

delivering HF into the process chamber, with the HF etching a silicon dioxide layer on the surface of the wafer; and

delivering ozone gas into the process chamber, with the ozone gas continually oxidizing a silicon surface of the wafer exposed by etching the silicon dioxide layer, wherein the HF etches the oxidized silicon surface and thins the wafer.

43. (Currently Amended) The method of claim 42 further comprising spinning the wafer, with the liquid layer substantially uniform and with the spinning helping to control the thickness of the liquid layer .

44. (Currently Amended) The method of claim 42 further comprising forming the liquid layer by spraying ~~the aqueous~~ liquid onto the wafer.

45. (Currently Amended) A method of thinning at least one silicon wafer, comprising:

placing the wafer into a process chamber;

spinning the wafer;

spraying a liquid including water onto the spinning wafer, with the liquid forming a substantially uniform liquid layer on the wafer;

controlling a thickness of the liquid layer;

providing hydrofluoric acid in the process chamber, with the hydrofluoric acid etching a silicon dioxide layer on a surface of the wafer; and

providing ozone gas in the process chamber, with the ozone gas oxidizing a silicon surface of the wafer exposed by etching the silicon dioxide layer, and with the HF etching the oxidized silicon surface until the wafer is thinned to approximately 5 to 20% of its initial thickness.

46. (Previously Presented) The method of claim 45 with the HF etching the silicon at a rate over 1000 angstroms/minute.

47. (Previously Presented) The method of claim 46 with the HF etching the silicon at a rate of 5000-10000 angstroms/minute.

48. (Previously Presented) The method of claim 45 with the wafer thinned to a thickness of 50-100 microns.

49. (Previously Presented) The method of claim 45 further comprising continuously supplying fresh ozone gas into the process chamber to continually oxidize the exposed silicon surface.

50. (Currently Amended) A method of thinning a silicon wafer, comprising:

backgrinding or plasma etching a surface of the wafer;

placing the wafer into a process chamber;

spinning the wafer;

spraying a liquid including water onto the wafer, with the liquid forming [[an]] a substantially uniform aqueous liquid layer on the surface of the wafer;

controlling a thickness of the aqueous liquid layer;

providing hydrofluoric acid in the process chamber, with the hydrofluoric acid removing a silicon dioxide layer on a surface of the wafer and exposing a silicon surface on the wafer;

supplying ozone gas into the process chamber, with the ozone gas continually oxidizing the exposed silicon surface of the wafer until the wafer is thinned to 50-100 microns.